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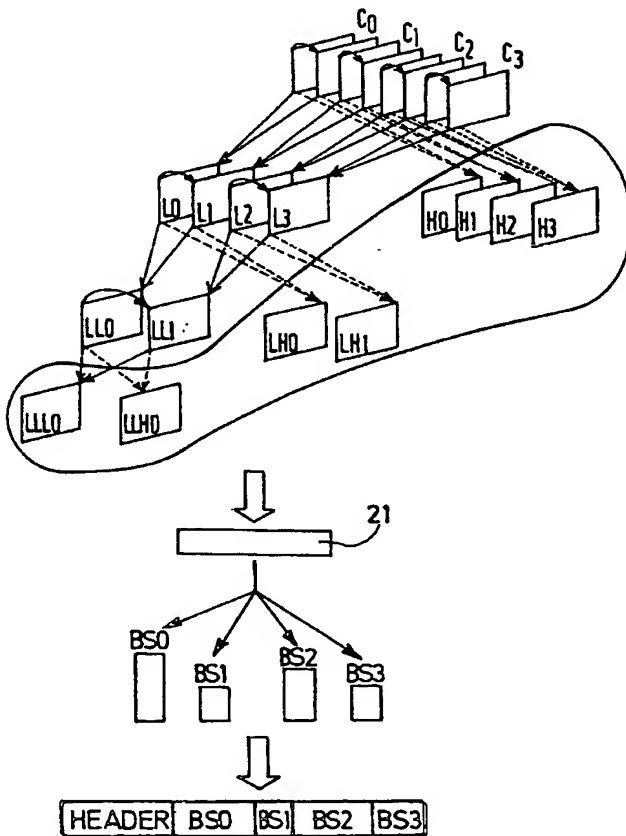
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[Continued on next page]

(54) Title: **3D WAVELET VIDEO CODING AND DECODING METHOD AND CORRESPONDING DEVICE**



(57) Abstract: The invention relates to a three-dimensional (3D) video coding method applied to a bitstream corresponding to an original video sequence that has been divided into successive groups of frames (GOFs). This coding method, applies to each successive GOF first a spatio-temporal analysis step, itself comprising a motion estimation sub-step, a motion compensated temporal filtering sub-step and a spatial analysis sub-step, and then an encoding step, itself comprising an entropy coding sub-step, performed on the low and high frequency temporal subbands resulting from the spatio-temporal analysis step and on motion vectors obtained by means of said motion estimation step, and an arithmetic coding sub-step, applied to the coded sequence thus obtained. According to the invention, the frequency subbands available at the end of the analysis step are coded in an order that corresponds to a reconstruction of the couples of frames in their original order, the bits necessary to decode the first couple being at the beginning of the coded bitstream, followed by the extra bits necessary to decode the second couple, and so on, up to the last couple.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04N7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>BOTTREAU V ET AL: "A fully scalable 3D subband video codec"</p> <p>PROCEEDINGS 2001 INTERNATIONAL CONFERENCE ON IMAGE PROCESSING. ICIP 2001. THESSALONIKI, GREECE, OCT. 7 - 10, 2001, INTERNATIONAL CONFERENCE ON IMAGE PROCESSING, NEW YORK, NY: IEEE, US, vol. 1 OF 3. CONF. 8, 7 October 2001 (2001-10-07), pages 1017-1020, XP010563939 ISBN: 0-7803-6725-1 page 1017 -page 1018, paragraph 2 figure 1</p> <p style="text-align: center;">--- -/--</p>	1-6



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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PCT/IB 03/03159

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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